

contain a gel held in solution as a hydrosol by the action of a peptizator. Purified tannin solutions do not tan, and the more "impure" the solution the better the tanning effect. Watery tanning solutions on standing in the air undergo changes that increase their tanning value, owing to the formation of an insoluble product that becomes peptized.

MOELLER finds a similar situation exists in the artificially prepared tanning solutions. In chinon tanning solutions the chinon takes the place of a peptizator, while hydrochinon is the peptized gel. In the mineral tanning solutions an insoluble metallic hydroxide is peptized into the solution condition by the peptizing action of the acid salt solution. According to MOELLER'S view, the properties of a tanning extract depend upon the equilibrium between the peptizator and the peptized substance, and the character of the leather depends upon the nature and quantity of the peptized gel that is taken up by the hide fibers.—F. E. DENNY.

Taxonomic notes.—Miss GILKEY¹⁰ has published a revision of the Tuberales of California, preceded by an account of the distribution of truffles in California, their economic importance, and their morphology and phylogeny. Accompanied by very full discussion, 11 genera are presented, including 32 species, the largest genus being *Tuber*, with 12 species. A new genus (*Hydnotryopsis*) and 15 new species are described, distributed among the following genera: *Hydnocystis*, *Genea* (3), *Hydnotrya*, *Tuber* (6), *Piersonia*, *Geopora* (2), and *Hydnotryopsis*.

WEST¹¹ has described a new genus of mycorrhizal fungi associated with the roots of the various genera of Marattiaceae. He names it *Stigeosporium*, and regards it as of special interest inasmuch as it produces "under natural conditions distinct reproductive bodies within the tissues of the host root."

WILLIAMS¹² has published a list of Peruvian mosses based upon two collections. It includes 71 species, among them 6 new species in the following genera: *Leptodontium*, *Globulina*, *Tortula*, *Grimmia*, *Bryum*, and *Hygrohypnum*.—J. M. C.

¹⁰ GILKEY, HELEN MARGARET, A revision of the Tuberales of California. Univ. Calif. Publ. Bot. 6:275-356. pls. 26-30. 1916.

¹¹ WEST, CYRIL, *Stigeosporium Marattiacearum*, gen. et sp. nov. Ann. Botany 30:357. 1916.

¹² WILLIAMS, R. S., Peruvian mosses. Bull. Torr. Bot. Club 43:323-334. pls. 17-20. 1916.